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PRELIMINARY ASSESSMENT/ VISUAL SITE INSPECTION

ORCHEM, INC.
(FORMERLY ASHLAND CHEMICAL COMPANY)
CINCINNATI, OHIO
OHT 400 011 615

FINAL REPORT

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460

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EXECUTIVE SUMMARY

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Orchem, Inc. (Orchem), formerly Ashland Chemical Company (Ashland) facility in Cincinnati, Ohio. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritizing RCRA facilities for corrective action.

Operations at the facility began about 1930. No documentation is available detailing early operational years at the facility. In 1980, Ashland filed a Part A permit application for the facility as a interim status treatment, storage, or disposal (TSD) facility. The application listed container storage (S01) but did not identify a specific hazardous waste storage area. The permit application also listed tank treatment (T01). Ashland used the facility to blend organic and inorganic chemicals into industrial surface cleaning compounds for the metal finishing industry. The facility underwent RCRA closure in 1982 and became a nongenerator of hazardous waste. The specific unit closed was not identified in available documentation.

Texo Corporation, Inc., purchased the facility in 1985 and immediately leased it to Orchem. Orchem uses the facility for blending specialty chemicals used in the food processing industry.

The PA/VSI identified the following three SWMUs and one AOC at the facility:

Solid Waste Management Units

1. Operations and Storage Area
2. Former Neutralization Pit
3. Former Chromate Destruction System

Areas of Concern

1. Chemical Storage Tanks

The potential for this facility to release hazardous constituents to on-site soils and ground water is moderate to high. It is not known how long the Chemical Storage Tanks (AOC 1) have been used at the facility. The tanks were not surrounded by a dike until Orchem installed the present one in 1985. Releases to soils during loading and unloading of the tanks probably

occurred in the past. The Operations and Storage Area (SWMU 1) and the Former Neutralization Pit (SWMU 2) have a moderate potential for release to on-site soils and ground water. SWMU 1 provides little secondary containment for chemical storage. During the VSI, PRC observed at least 300 55-gallon drums in this area, along with other various sized containers. Many drums were severely rusted and stacked three high. OEPA recently tested a few of these drums and subsequently requested from Orchem an inventory of all drums at the facility. SWMU 2 was removed from the facility in 1982. PRC could not determine how long the unit was used or if it had secondary containment. No soil samples were collected when the unit was removed. The Former Chromate Destruction System (SWMU 3) has a low potential for release. It was removed from the facility in 1982.

Area ground water is not used as a local drinking water source. All drinking water in the area is supplied by the City of Cincinnati. The City of Cincinnati draws water from an intake on the Ohio River about 9 miles above the confluence of the Ohio River and the Mill Creek. The nearest drinking water well is located about 4 miles northwest and upgradient of the facility, in Lockland. There are no drinking water wells downgradient from the Orchem facility. Orchem obtains all water from the City of Cincinnati.

The potential for all SWMUs at the facility to release hazardous constituents to surface water is low. All water from the facility is discharged to the City of Cincinnati Municipal Sewer District (MSD). Orchem does not possess a National Pollutant Discharge Elimination System (NPDES) permit. The nearest surface water body is the Mill Creek, about 1,800 feet northwest of the facility.

The potential for the facility to release hazardous constituents to air is low. The facility has no air permits, and no complaints of air releases from the facility have been documented.

Because of the age of the facility, unknown activities over the years, and unsound containment, PRC believes that soil and ground-water sampling should be performed at the facility. Sampling should focus on the area in and around the Chemical Storage Tanks (AOC 1) area and the Former Neutralization Pit (SWMU 2). Sampling should also be performed at various locations throughout the Operations and Storage Area (SWMU 1). All samples should be analyzed for hazardous constituents. OEPA should continue to monitor Orchem's actions concerning the 55-gallon drums stored at the facility. Analysis and disposal of these materials should be conducted in an environmentally sound manner.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has usually exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining additional information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Orchem, Inc. (Orchem), formerly Ashland Chemical Company (Ashland) facility (EPA Identification No. OHT 400 011 615) in Cincinnati, Ohio. The PA was completed on December 4, 1992. PRC gathered and reviewed information from the Ohio Environmental Protection Agency (OEPA), EPA Region 5 RCRA files, the U.S. Department of Agriculture (USDA), the Ohio Department of Natural Resources (ODNR), and the U.S. Geological Survey (USGS). The VSI was conducted on December 8, 1992. It included interviews with facility representatives and a walk-through inspection of the facility. PRC identified three SWMUs and one AOC at the facility.

PRC completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included as Attachment A. The VSI is summarized and nine inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C.

2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; a history of documented releases; regulatory history; environmental setting; and receptors.

2.1 FACILITY LOCATION

The Orchem facility is located at 100 Murray Road in Cincinnati, Hamilton County, Ohio. Figure 1 shows the location of the facility in relation to the surrounding topographic features (latitude 39°10'52"N and longitude 84°29'37"W).

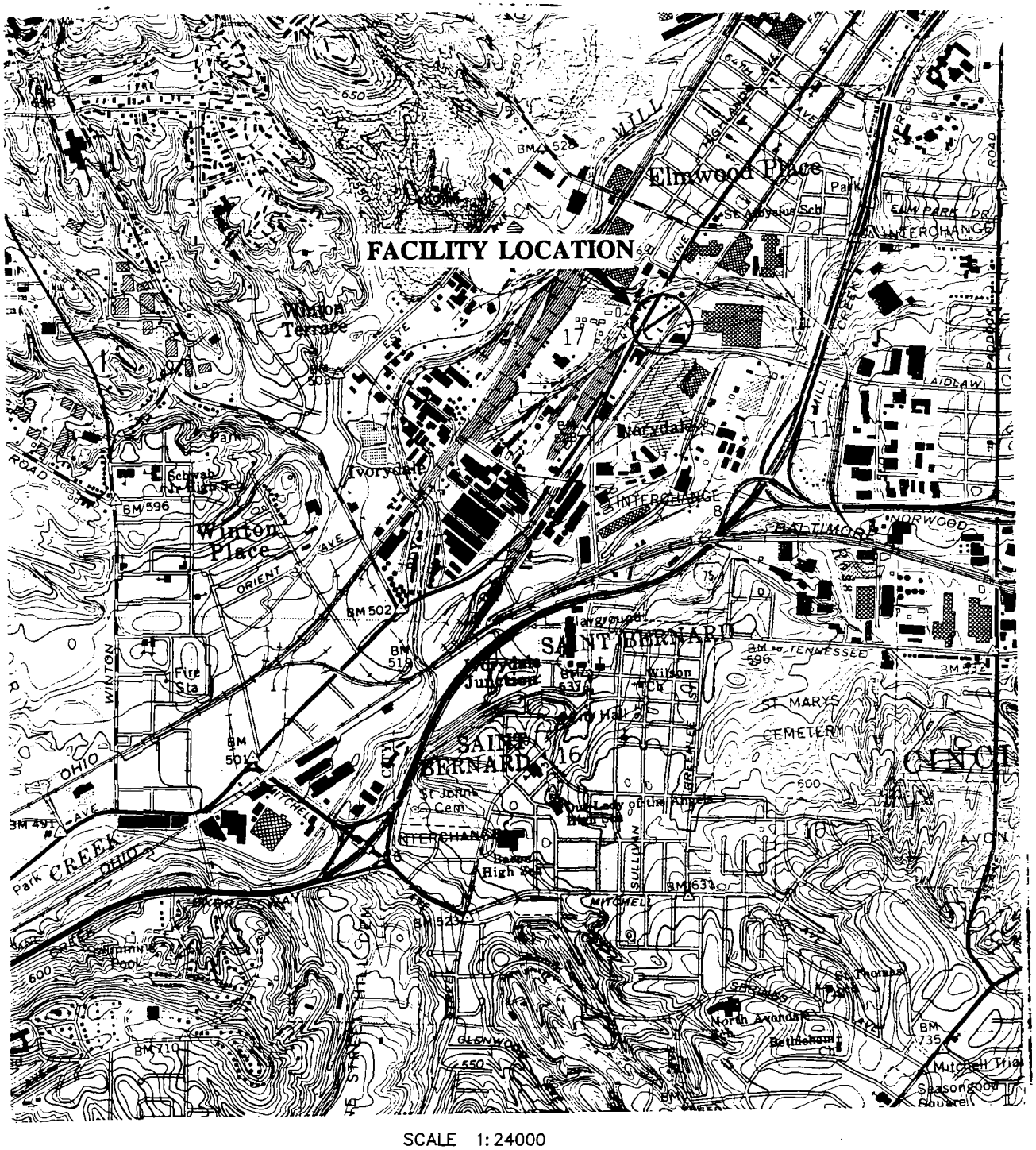
The facility is bordered to west and north by the Este Oil Company, to the east by Conrail railroad tracks and Jan Products, Inc., and to the south by the Proctor & Gamble Company.

2.2 FACILITY OPERATIONS

The facility occupies about 3 acres in a heavily industrialized area of Cincinnati. It consists of a trailer truck storage yard, a main operations building, a small storage building, and an Operations and Storage Area (SWMU 1). Most of the property is covered with gravel; however, a few concrete pads are scattered about the facility.

Orchem uses the facility to blend specialty chemicals mainly used in the food processing industry. Raw materials, including surfactants and alkaline materials, are brought to the facility in various sized containers (primarily 55-gallon drums) and blended to a particular specification.

According to a Part A permit application filed for the facility in 1980 by Ashland, operations at the facility began in 1930 (Ashland, 1980b). No documentation is available detailing when Ashland began operations at the facility or what the facility was used for before Ashland acquired it. Ashland operations involved blending organic and inorganic chemicals into industrial surface cleaning compounds for the metal finishing industry. Raw materials were brought to the facility in 55-gallon drums, and by bulk tanker trucks and bulk railroad tankers. Bulk materials were stored in the Chemical Storage Tanks (AOC 1). The raw materials were blended according to a customer specification. The product was then packed in either 55-gallon drums or fiber pac containers and shipped from the facility. Ashland planned to disassemble the majority of the buildings and systems at the facility (OEPA, 1981). However, little of this work ever began, and operations at the facility ended in late 1981. In late 1982, ownership of the



SCALE 1:24000

1 0 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

SCALE: 1" = 2,000'

QUADRANGLE LOCATION

SOURCE: Modified from USGS, 1972.

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FIGURE 1

FACILITY LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

facility was transferred to the Globe-Right division of Ashland (Globe-Right). The facility was inactive under Globe-Right. Texo Corporation, Inc. (Texo), purchased the facility in early 1985 and leased it to Orchem.

The Orchem facility representative stated that the facility was in ruin and overgrown with vegetation when the company took over. Orchem repaired various portions of the facility and constructed a concrete dike around the Chemical Storage Tanks (AOC 1). Orchem is finishing the renovation of a separate location in Cincinnati and plans to vacate the current facility by middle summer 1993.

2.3 WASTE GENERATION AND MANAGEMENT

The facility's SWMUs are identified in Table 1. The facility layout, including SWMUs and AOCs, is shown in Figure 2. The facility's waste streams are summarized in Table 2.

Orchem currently generates no hazardous waste. The only waste generated at the facility consists of nonhazardous wash water from cleaning the tanks used in the blending process. The wash water consists of water and various nonhazardous blending chemicals and is usually reused in the blending process. Wash water becomes waste when separate batches of chemicals with different components are blended, and the wash water cannot be used to rinse all tanks. The wash water is discharged to the City of Cincinnati Municipal Sewer District (MSD). Orchem does not possess a permit to discharge to MSD.

Little documentation was available detailing waste generation under Ashland. According to the Part A permit application filed by Ashland and from information documented during closure at the facility, Ashland generated chromium wastes (D007), corrosive wastes (D002), and wastewater. Chromium wastes were generated from the treatment of chromium containing compounds at the Former Chromate Destruction System (SWMU 3). PRC found no documentation in the files explaining how this system operated. The waste materials were placed in 55-gallon drums while excess wastewater was discharged to MSD. Corrosive wastes were generated in the Former Neutralization Pit (SWMU 2) from adding caustic material to acidic chemicals used in the blending process (OEPA, 1981). The neutralization generated corrosive sludge that was placed in 55-gallon drums. Neutralized wastewater was discharged to MSD.

Ashland apparently had no designated hazardous waste storage area at the facility. Drummed waste from SWMU 2 and 3 was placed in various locations of the Operations and

TABLE 1
SOLID WASTE MANAGEMENT UNITS

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit[a]	Status
1	Operations and Storage Area	Yes	Active, RCRA-closed in 1982
2	Former Neutralization Pit	No	Inactive; removed in 1982
3	Former Chromate Destruction System	No	Inactive; removed in 1982

Note:

[a] A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.

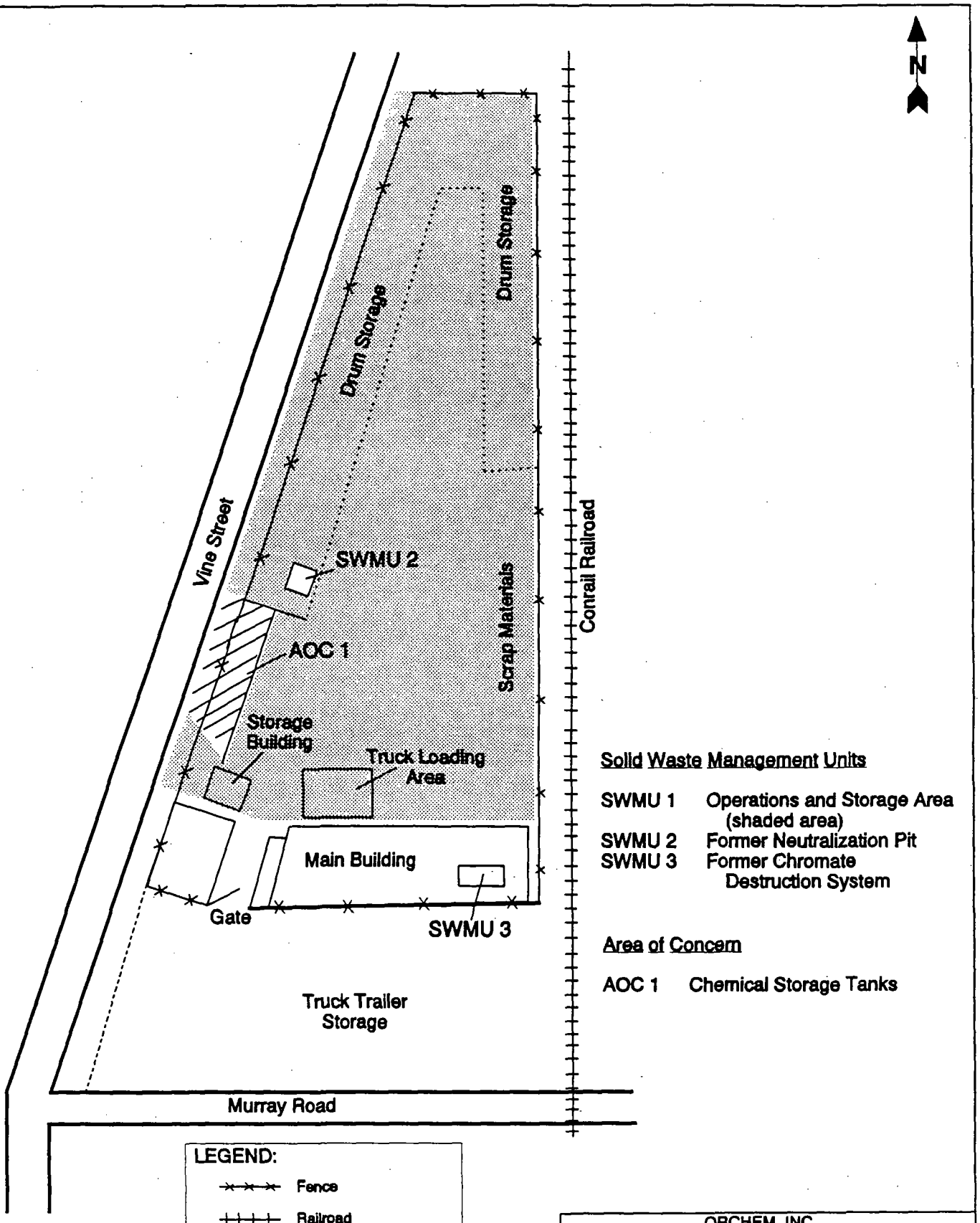

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FIGURE 2
FACILITY LAYOUT

Source: Modified from Ashland sketch received by PRC on 12/08/92. No Scale

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TABLE 2
SOLID WASTES

Waste/EPA Waste Code[a]	Source	Solid Waste Management Unit[b]
Under Orchem		
Wash water/NA	Blending tank cleaning	None
Under Ashland		
Chromium wastes/D007	Chromate destruction	1 and 3
Corrosive wastes/D002	Neutralization of acidic chemicals	1 and 2
Wastewater/NA	Chromate destruction and neutralization of acidic chemicals	2

Notes:

[a] Not applicable (NA) designates nonhazardous waste.

[b] "None" indicates that the waste is not managed onsite.

Storage Area (SWMU 1). No documentation was available indicating where drummed hazardous waste was taken when removed from the facility or how treatment was accomplished.

2.4 HISTORY OF DOCUMENTED RELEASES

No releases from this facility have been documented.

2.5 REGULATORY HISTORY

Regulatory involvement over the years at the facility has been limited. Ashland submitted a Notification of Hazardous Waste Activity form to EPA in August 1980 (Ashland, 1980a). In November 1980, the facility filed a Part A permit application to operate under interim status as a treatment, storage, or disposal (TSD) facility. The application listed container storage (S01) and tank treatment (T01). The application did not identify a specific hazardous waste storage area at the facility. Treatment was identified as neutralization and chromate destruction, which occurred in SWMUs 2 and 3, respectively. The permit application listed corrosive wastes (D002) and chromium wastes (D007) (Ashland, 1980b).

In late 1981, Ashland informed EPA that the company was planning to end operations at the facility. EPA informed Ashland that a closure plan would be required for the facility. In February 1982, Ashland submitted to EPA a closure plan for the facility involving the removal of 40 drums of corrosive and chromium waste (Ashland, 1982a). The closure plan did not identify a unit used to store the waste or mention closure of a tank treatment unit (T01). EPA approved the plan in March 1982 (U.S. EPA, 1982a).

In August 1982, Ashland informed EPA that closure activities were completed and submitted a certification of closure from a professional engineer (Ashland, 1982b). The certification detailed that all waste had been removed from the facility, all tanks had been drained and triple rinsed, and the Former Neutralization Pit (SWMU 2) had been drained and excavated. In September 1982, EPA acknowledged that closure was complete and considered the facility closed (U.S. EPA, 1982b).

In July 1981, OEPA performed a TSD facility inspection at Ashland. OEPA found no violations and noted that the main waste stream generated was wastewater from the Former Neutralization Pit (SWMU 2) (OEPA, 1981). No other inspections by EPA or OEPA have been conducted at the facility.

As mentioned in Section 2.2, in late 1982, ownership of the facility was transferred to Globe-Right. Texo purchased the facility in early 1985 and immediately leased it to Orchem. Orchem has not filed a revised Notification of Hazardous Waste Activity form and is considered by OEPA to be a nongenerator of hazardous waste (PRC, 1993). Orchem intends to vacate the facility by middle summer 1993.

Orchem does not have air permits. No complaints from area residents concerning air discharges from the facility have been documented for either Ashland or Orchem. Ashland had no air permits.

Orchem does not have a National Pollutant Discharge Elimination System (NPDES) permit. In 1985, the company applied for a permit to discharge to MSD. The Orchem facility representative stated that the permit application was never processed. The company reapplied in about 1989 and never received a response from MSD. MSD files do not indicate that Ashland was permitted to discharge to MSD.

Before the VSI, PRC performed a drive-by to verify the facility's exact location. During the drive-by, PRC noted at least 300 drums on site, many of which were severely rusted. PRC informed OEPA of the facility's condition, and OEPA agreed to meet with PRC during the VSI. Because of the number and condition of drums at the facility, OEPA informed PRC that a sampling visit would immediately be performed.

In late December 1992, OEPA sampled at least four drums at the facility that Orchem claimed contained storm water. Preliminary analytical results revealed methylene chloride in at least one drum (PRC, 1993). OEPA has requested from Orchem an inventory of all drums on site. Because Orchem had planned to discharge drummed material to MSD upon vacating the facility, OEPA will require the company to receive approval from MSD for all discharges. All drums containing questionable materials will have to be sampled and analyzed for hazardous constituents before discharge to MSD can occur. OEPA is planning a follow-up visit to the facility (PRC, 1993).

PRC identified no underground storage tanks (UST) at the facility. No CERCLA activity has occurred at the facility.

2.6 ENVIRONMENTAL SETTING

This section describes the climate; flood plain and surface water; geology and soils; and ground water in the vicinity of the facility.

2.6.1 Climate

The climate in Cincinnati consists of cold winters and hot summers. The yearly average temperature is 54°F. The lowest average monthly temperature is 21.7°F in January. The highest average monthly temperature is 86.8°F in July. Precipitation for southwest Ohio is well distributed throughout the year. Average yearly rainfall for Hamilton County is 40.07 inches. Rainfall peaks in March at 4.18 inches and is at its least in October at 2.38 inches. The 1-year, 24-hour maximum rainfall is 2.6 inches, and the average yearly net precipitation is 6.0 inches. The prevailing wind is from the south-southwest, and the highest average wind speed is 11 miles per hour in the winter (USDA, 1982).

2.6.2 Flood Plain and Surface Water

The Orchem facility does not lie in a flood plain or flood prone area (FEMA, 1974). The nearest surface water body is the Mill Creek about 1,800 feet northwest of the facility. It eventually enters the Ohio River about 6.5 miles south of the facility. The Mill Creek is used mainly for storm water drainage from various industrial facilities along its route. The Ohio River is used as a drinking water source for the city of Cincinnati, as a transportation route, and for recreational purposes.

In 1988, the City of Cincinnati completed a concrete channelization project on portions of the Mill Creek to prevent erosion. The portion that runs near the Orchem facility has been channelized. Stormwater runoff from the facility is to the Mill Creek.

2.6.3 Geology and Soils

Hamilton County lies almost on the crest of the Cincinnati Arch, a large anticline running from Tennessee to Canada. The bedrock in the area is Ordovician age shale of the Kope formation, consisting of a 67- to 100-foot sequence of interbedded shales and limestones. Depth to bedrock in the area is about 150 feet below ground surface. During the Tertiary period (about 36 million years ago), the Hamilton County area was deeply eroded by a large drainage system that emptied into the ancient Teays River system. Pleistocene glaciation (about 2 million years ago) radically altered the drainage system, changing flow direction and filling valleys with glacial deposits of till, sand, clay, silt, and gravel (USDA, 1982).

Glacial materials in the Cincinnati area were deposited as a result of Illinoisan and Wisconsinan glaciation periods. The glacial deposits in the area of the Orchem facility are quite unconsolidated and consist of the following materials in descending order (ODNR, 1992):

- 0 to 8 feet: Soil and fill material
- 8 to 12 feet: Muddy gravel
- 12 to 65 feet: Blue clay
- 65 to 115 feet: Medium to coarse sand
- 115 to 150 feet: Sand and gravel

Soils near the facility belong to the Urban Land-Martinsville-Fox association. Typically, the Martinsville-Fox soils are well drained and medium textured; they are usually located on stream terraces and outwash plains (USDA, 1982). Because of the amount of industrial activity in the area, most original soils have been disturbed.

2.6.4 Ground Water

Depth to ground water in the area is about 35 feet below ground surface. The Orchem facility lies over glacial deposits capable of yielding 250 to 500 gallons of water per minute (ODNR, 1992). Bedrock in the area does not store or transmit large quantities of water. Ground-water flow is generally southwest towards the Ohio River; recharge is from ground-water flow from the north and surface infiltration. The nearest drinking water well is about 4 miles northwest of the facility in Lockland (ODNR, 1988).

2.7 RECEPTORS

The Orchem facility is located in a highly industrialized area of western Cincinnati and is completely surrounded by other industrial facilities. The population of Cincinnati is 385,450 (USDC, 1991). The nearest residential area is Elmwood Place, about 1,200 feet north of the facility. About 800 private residences are within 1 mile of the facility. The nearest school is about 1,200 feet north. The facility is surrounded by a 6-foot-high, steel, chain-link fence.

As mentioned in Section 2.6.2, the nearest surface water body is the Mill Creek. It enters the Ohio River about 6.5 miles south of the facility. The Mill Creek is used mainly for storm water drainage.

Area ground water is not used as a local drinking water source. All drinking water in the area is supplied by the City of Cincinnati (ODNR, 1988). The City of Cincinnati draws water from an intake on the Ohio River about 9 miles above the confluence of the Ohio River and Mill Creek. The nearest drinking water well is located about 4 miles northwest and upgradient of the facility, in Lockland. There are no drinking water wells downgradient from the facility. Orchem obtains all water from the City of Cincinnati.

The Mill Creek is a sensitive environment mainly because of aquatic life. No wetlands exist within 2 miles of the facility (USGS, 1981).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the three SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and PRC's observations. Figure 2 shows the SWMU locations.

SWMU 1	**Operations and Storage Area**
Unit Description:	The Operations and Storage Area includes the northern two-thirds of the facility (about 1.5 acres) and includes the Chemical Storage Tanks (AOC 1), a truck loading dock, and an outer storage building. The area's base is mainly gravel; however, a few unbermed concrete pads occur throughout the area. A storm water drain is located near the central portion of this area that discharges to the Mill Creek. Ashland used the area for container storage; however, a specific storage unit in the area was not designated. Orchem uses the area mainly to store drummed chemicals.
Date of Startup:	Facility operations began about 1930. It is not known when this SWMU was first used for waste storage.
Date of Closure:	The facility underwent RCRA closure in 1982. Orchem currently uses the area for product storage.
Wastes Managed:	Wastes managed in the area included chromium wastes (D007) and corrosive wastes (D002). No documentation is available detailing how the wastes were managed after removal from the facility.
Release Controls:	Unbermed concrete pads occur throughout the area. However, this area is mainly gravel and has no form of release controls.
History of Documented Releases:	No releases from the area are documented.
Observations:	During the VSI, the area contained at least 300 55-gallon drums and various other sized containers (see Photograph Nos. 1 through 5). Orchem stated that the drummed materials were product. Many of the drums, stacked three high in most areas, were severely rusted and appeared to have been onsite for an extended period of

time. The concrete pads throughout the area were severely cracked and stained. By slightly pushing various drums, PRC determined that practically all the drums were full of liquid materials. PRC also observed a milky white material at the base of the truck loading dock (see Photograph No. 6). No stained soil was noted in the area.

SWMU 2	**Former Neutralization Pit**
Unit Description:	The Former Neutralization Pit was just north and adjacent to the Chemical Storage Tanks (AOC 1) at the west side of the facility. Its dimensions were not documented. However, it was constructed of concrete and had a capacity of 1,800 gallons. The unit was used to neutralize acidic chemicals used by Ashland in the blending process.
Date of Startup:	A startup date for the unit could not be determined.
Date of Closure:	Ashland removed the unit in 1982.
Wastes Managed:	Wastes managed in the unit included corrosive waste sludge (D002) and nonhazardous wastewater. Sludge was placed in 55-gallon drums and stored in the Operations and Storage Area (SWMU 1). Wastewater was discharged to MSD.
Release Controls:	The unit was constructed of concrete. It is not known if the concrete was sealed.
History of Documented Releases:	No releases from the unit were documented.
Observations:	The area is now covered with soil and gravel. Skids containing full 55-gallon drums of liquid materials overlie the area. No evidence of release was noted.
SWMU 3	**Former Chromate Destruction System**
Unit Description:	The Former Chromate Destruction System was in the southeast corner of the main building at the facility. No documentation was

	available detailing the capacity of the unit or how it operated. Ashland removed the unit in 1982.
Date of Startup:	No documentation is available indicating when this unit was first used.
Date of Closure:	Ashland removed the unit in 1982.
Wastes Managed:	Chromium wastes (D007), along with nonhazardous wastewater were generated from the treatment of chromium containing compounds. The chromium wastes were placed in 55-gallon drums and stored in the Operations and Storage Area (SWMU 1). Wastewater was discharged to MSD.
Release Controls:	The unit was indoors and on concrete.
History of Documented Releases:	No releases from this unit were documented.
Observations:	The area now contains a blending tank used by Orchem (see Photograph No. 7). The facility representative stated that Orchem had refurbished the area. No evidence of release was noted in the area.

4.0 AREAS OF CONCERN

PRC identified one AOC during the PA/VSI. The AOC is discussed below; its location is shown in Figure 2.

AOC 1 Chemical Storage Tanks

The Chemical Storage Tanks are at the western border of the facility, in the Operations and Storage Area (SWMU 1). The unit contains five aboveground, steel tanks ranging in capacity from 3,500 to 10,000 gallons. The tanks are positioned on an unsealed concrete base. Orchem uses three of the tanks for product storage; the other two are inactive (see Photograph No. 8). No documentation is available indicating when the tanks were installed or if all tanks were installed at once. PRC could not determine what types of chemicals Ashland stored in the tanks.

The facility representative stated that Ashland removed at least two tanks from the unit when Texo purchased the facility; however, he was not sure how many tanks originally comprised the unit. When Orchem began operations at the facility, the company installed a 3-foot, unsealed, concrete dike around the remaining tanks. The diked area has a stormwater drain that empties to the ground surface. The drain is kept closed.

During the VSI, PRC noted various stains surrounding the unit and deteriorating concrete (see Photograph No. 9). The storage tanks appeared to be in sound condition; however, the sides of the tanks were stained with an unidentifiable material.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified three SWMUs and one AOC at the Orchem facility. Background information on the facility's location; operations; waste generating processes and waste management practices; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. The AOC is discussed in Section 4.0. Following are PRC's conclusions and recommendations for each SWMU and the AOC. Table 3, at the end of this section, summarizes the SWMUs and the AOC at the facility and the recommended further actions.

SWMU 1 **Operations and Storage Area**

Conclusions: It is not known how long the unit has been used for chemical storage; however, the facility began operations about 1930. During the VSI, PRC observed over 300 55-gallon drums, along with other various sized containers, in the area. The facility representative for Orchem stated that materials in the drums were product. Little containment is provided for chemicals stored in the area. The potential for release to environmental media is summarized below.

On-Site Soils and Ground Water: Moderate. Because past uses of the facility are unknown, and because containment of chemicals is unsound, soil contamination is probable. If soils are contaminated, ground-water contamination is possible.

Surface Water: Moderate. Releases from the facility could be carried by stormwater to the Mill Creek.

Air: Low. Possible contamination would likely be limited to soils and ground water.

Recommendations: PRC recommends that soil borings be performed throughout this unit, with sampling of soil and ground water. Samples should be analyzed for hazardous constituents. OEPA should continue to monitor Orchem's actions concerning the 55-gallon drums stored at the facility. Analysis and disposal of these materials should be conducted in an environmentally sound manner.

SWMU 2 **Former Neutralization Pit**

Conclusions: This unit was removed from the facility in 1982. PRC could not determine how long the unit was used or if it had secondary containment. The potential for release to environmental media is summarized below.

On-Site Soils and Ground Water: Moderate. Because the unit may not have had secondary containment, soil contamination is possible. If soils are contaminated, ground-water contamination is possible.

Surface Water: Low. Contamination from the unit would be limited to on-site soils and ground water.

Air: Low. Possible contamination would likely be limited to soils and ground water.

Recommendations: PRC recommends that soil borings be performed in this unit's former location, with sampling of soil and ground water. Samples should be analyzed for hazardous constituents.

SWMU 3 **Former Chromate Destruction System**

Conclusions: This unit was located indoors and on concrete. Ashland removed the unit from the facility in 1982. Orchem has refurbished much of the building where this unit was located. Because the unit was indoors and has been removed, the potential for release to ground water, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action for this SWMU.

AOC 1 **Chemical Storage Tanks**

Conclusions: PRC was unable to determine when the Chemical Storage Tanks were installed and how many tanks originally comprised the unit. No documentation is available indicating what types of chemicals Ashland stored in the tanks. Orchem installed a containment dike around the unit in about 1985. PRC noted stains on the concrete around the dike and what appeared to be chemical deterioration of the concrete. The potential for release to environmental media is summarized below.

On-Site Soils and Ground Water: Moderate to high. Because the tanks were not diked for an unknown length of time, spills from the tanks could have easily reached surrounding soils. If soils are contaminated, ground-water contamination is possible.

Surface Water: Low. Contamination from the unit would be limited to on-site soils and ground water.

Air: Low. Possible contamination would most likely be trapped in soils or ground water.

Recommendations: PRC recommends that soil borings be performed in the vicinity of this unit, with sampling of soil and ground water. Samples should be analyzed for hazardous constituents.

TABLE 3
SWMU AND AOC SUMMARY

SWMU	Dates of Operation	Evidence of Release	Recommended Further Action
1. Operations and Storage Area	Unknown to present	Staining on concrete pads. Unidentified white material was noted at the loading dock	Soil and groundwater sampling throughout the area; analysis of samples for hazardous constituents. OEPA should continue to monitor removal of drums on-site. Analysis and disposal of these materials should be conducted in an environmentally sound manner.
2. Former Neutralization Pit	Unknown to 1982	None	Soil and groundwater sampling near the unit's former location; analysis of samples for hazardous constituents
3. Former Chromate Destruction System	Unknown to 1982	None	None

AOC	Dates of Operation	Evidence of Release	Recommended Further Action
1. Chemical Storage Tanks	Unknown to present	Stained and deteriorated concrete	Soil and groundwater sampling near the unit; analysis of samples for hazardous constituents

REFERENCES

Ashland Chemical Company (Ashland), 1980a. Notification of Hazardous Waste Activity for Ashland, August 8.

Ashland, 1980b. Part A Permit Application for Ashland, November 12.

Ashland, 1982a. Closure Plan for the Ashland Facility, February 2.

Ashland, 1982b. Certification of Closure for the Ashland Facility, August 20.

Federal Emergency Management Agency (FEMA), 1974. Flood Insurance Rate Map for Hamilton County.

Ohio Department of Natural Resources (ODNR), 1988. Sole Source Aquifer Map for Hamilton County, October.

ODNR, 1992. Well Log Compilation for Orchem, Inc. Vicinity.

Ohio Environmental Protection Agency (OEPA), 1981. Treatment, Storage, or Disposal Facility Inspection Report, July 15.

PRC Environmental Management, Inc. (PRC), 1993. Mark Metcalf, OEPA, Telephone Communication with Pete Zelinskas, February 4.

U.S. Environmental Protection Agency (U.S. EPA), 1982a. Approval of Ashland Closure Plan, March 3.

U.S. EPA, 1982b. Acknowledgement of Proper Closure at the Ashland Facility, September 1.

U.S. Department of Agriculture (USDA), 1982. Soil Survey for Hamilton County.

U.S. Department of Commerce (USDC), 1991. Census of Population and Housing, Summary Population and Housing Characteristics, Ohio, August.

U.S. Geological Survey (USGS), 1981. Topographic Map for the Cincinnati East and Cincinnati West Quadrangles, 7.5 Minute Series.

ATTACHMENT A

EPA PRELIMINARY ASSESSMENT FORM 2070-12

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	OHT400011615

II. SITE NAME AND LOCATION

01 SITE NAME *(Legal, common, or descriptive name of site)*	02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER				
Orchem, Inc.	100 Murray Road				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Cincinnati	OH	45217	Hamilton	005	
09 COORDINATES: LATITUDE	**LONGITUDE**				
39°10'52"N	84°29'37"W				

10 DIRECTIONS TO SITE *(Starting from nearest public road)*

From downtown Cincinnati take I-75 north to the Mitchell Street exit. Turn left on Mitchell and go to Vine Street. Go right on Vine Street for about 2 miles. Facility is on the corner of Vine Steet and Murray Road.

III. RESPONSIBLE PARTIES

01 OWNER *(If known)*	02 STREET *(Business, mailing residential)*		
Texo Corporation, Inc.	2801 Highland Avenue		
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**
Cincinnati	OH	45212	(513) 731-3400
07 OPERATOR *(If known and different from owner)*	**08 STREET** *(Business, mailing, residential)*		
Orchem, Inc.	10925 Reed Hartman Highway		
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**
Blue Ash	OH	45442	(513) 984-0990

13 TYPE OF OWNERSHIP *(Check one)*

☒ A. PRIVATE ☐ B. FEDERAL: _____ *(Agency Name)* ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER _____ *(Specify)* ☐ G. UNKNOWN

14. OWNER/OPERATOR NOTIFICATION ON FILE *(Check all that apply)*

☒ A. RCRA 3010 DATE RECEIVED: 08/08/80 (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE *(CERCLA 103 c)* DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 12/08/92 ☐ NO

BY *(Check all that apply)*

☐ A. EPA ☒ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR

☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ *(Specify)*

CONTRACTOR NAME(S): PRC Environmental Management, Inc. (PRC)

02 SITE STATUS *(Check one)*

☒ A. ACTIVE ☐ B. INACTIVE ☐ C.UNKNOWN

03 YEARS OF OPERATION

about 1930 | present (BEGINNING YEAR ENDING YEAR) ☐UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

The facility currently generates nonhazardous washwater from the cleaning of blending tanks. The facility contains about 300 55-gallon drums of unidentified liquid materials. The materials may eventually be considered waste.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Potential soil and ground-water contamination from past operations and from the drums currently stored on-site.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION *(Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.)*

☐ A. HIGH *(Inspection required promptly)* ☒ B. MEDIUM *(Inspection required)* ☐ C. LOW *(Inspect on time-available basis)* ☐ D. NONE *(No further action needed; complete current disposition form)*

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF *(Agency/Organization)*			03 TELEPHONE NUMBER
Kevin Pierard	U.S. EPA			(312) 886-4448
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER**	**08 DATE**
Pete Zelinskas		PRC	(513) 241-0149	02/11/93 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	OHT400011615

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER _____ *(Specify)*
- ☐ E. SLURRY
- ■ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE *(Measures of waste quantities must be independent)*

TON _____

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS *(Check all that apply)*

- ☐ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. INFLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			Note: There are about 300 55-gallon drums on site. The
OLW	OILY WASTE			drums are currently being sampled and may be considered
SOL	SOLVENTS			waste after analysis.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES *(See Appendix for most frequently cited CAS Numbers)*

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
			Drum Storage		
			Drum storage		

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION *(Cite specific references; e.g., state files, sample analysis, reports)*

U.S. EPA Region 5 and OEPA - Southwest District Files

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	OHT400011615

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 □ OBSERVED (DATE:_____) — ■ POTENTIAL — □ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION

Potential ground-water contamination from past and current operations.

01 □ B. SURFACE WATER CONTAMINATION — 02 □ OBSERVED (DATE:_____) — □ POTENTIAL — □ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None

01 □ C. CONTAMINATION OF AIR — 02 □ OBSERVED (DATE:_____) — □ POTENTIAL — □ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None

01 □ D. FIRE/EXPLOSIVE CONDITIONS — 02 □ OBSERVED (DATE:_____) — □ POTENTIAL — □ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None

01 ■ E. DIRECT CONTACT — 02 □ OBSERVED (DATE:_____) — ■ POTENTIAL — □ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 5 — 04 NARRATIVE DESCRIPTION

The facility is well-secured.

01 ■ F. CONTAMINATION OF SOIL — 02 □ OBSERVED RELEASE_____) — ■ POTENTIAL — □ ALLEGED
03 AREA POTENTIALLY AFFECTED: 3 *(Acres)* — 04 NARRATIVE DESCRIPTION

Potential for soil contamination from current and past operations.

01 ■ G. DRINKING WATER CONTAMINATION — 02 □ OBSERVED (DATE:_____) — ■ POTENTIAL — □ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Not known — 04 NARRATIVE DESCRIPTION

Although ground-water in the vicinity is not used as a drinking water source, drinking water contamination is possible.

01 ■ H. WORKER EXPOSURE/INJURY — 02 □ OBSERVED (DATE:_____) — ■ POTENTIAL — □ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 5 — 04 NARRATIVE DESCRIPTION

Workers could become exposed to contamination.

01 ■ I. POPULATION EXPOSURE/INJURY — 02 □ OBSERVED (DATE:_____) — ■ POTENTIAL — □ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 5 — 04 NARRATIVE DESCRIPTION

See above descriptions.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	OHT400011615

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE:_____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE:_____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE:_____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES — 02 ☐ OBSERVED (DATE:_____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None currently. However, drums stored on site may be considered waste after analysis. The drums have no secondary containment.

01 ☐ N. DAMAGE TO OFF-SITE PROPERTY — 02 ☐ OBSERVED (DATE:_____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed.

01 ☐ O. CONTAMINATION OF SEWERS, DRAINS, WWTPS — 02 ☐ OBSERVED (DATE:_____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE:_____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: Not known

IV. COMMENTS

None

V. SOURCES OF INFORMATION *(Cite specific references; e.g., state files, sample analysis, reports)*

See Part 2, Section VI

ATTACHMENT B
VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

Orchem, Inc.
100 Murray Road
Cincinnati, Ohio 45217
OHT 400 011 615

Date:	December 8, 1992
Primary Facility Representative:	Mr. Jerry Ketover, Orchem President
Representative Telephone No.:	(513) 984-0990
Additional Facility Representatives:	Paul Jones, P&D Environmental Services Brenda Cook, P&D Environmental Services
Inspection Team:	Peter Zelinskas, PRC Environmental Management, Inc. Stan Lynn, PRC Environmental Management, Inc. Mark Metcalf, OEPA
Photographer:	Stan Lynn
Weather Conditions:	Cloudy, cold, with temperatures between 30° and 35°F
Summary of Activities:	The visual site inspection (VSI) began at 10:00 a.m. with an introductory meeting. The inspection team explained the purpose of the VSI and the agenda for the visit. Facility representatives then discussed current facility operations; however, they were unable to supply information concerning Ashland's operations. The VSI tour began at 10:50 a.m. PRC first walked through the interior of the main building and the location of the Former Chromate Destruction System (SWMU 3) was observed. PRC then toured the outside area and viewed the Former Neutralization Pit (SWMU 2), the Chemical Storage Tanks (AOC 1) and the Operations and Storage Area (SWMU 1). The tour concluded at 12:15 p.m., after which the inspection team held an exit meeting with facility representatives. The VSI was completed and the inspection team left the facility at 12:30 p.m.

Photograph No. 1
Orientation: Northwest
Description: Drum storage in the Operations and Storage Area. Note that many of the drums area stored on bare ground.

Location: SWMU 1
Date: 12/08/92

Photograph No. 2
Orientation: West-Northwest
Description: Deteriorating drums in the Operations and Storage Area.

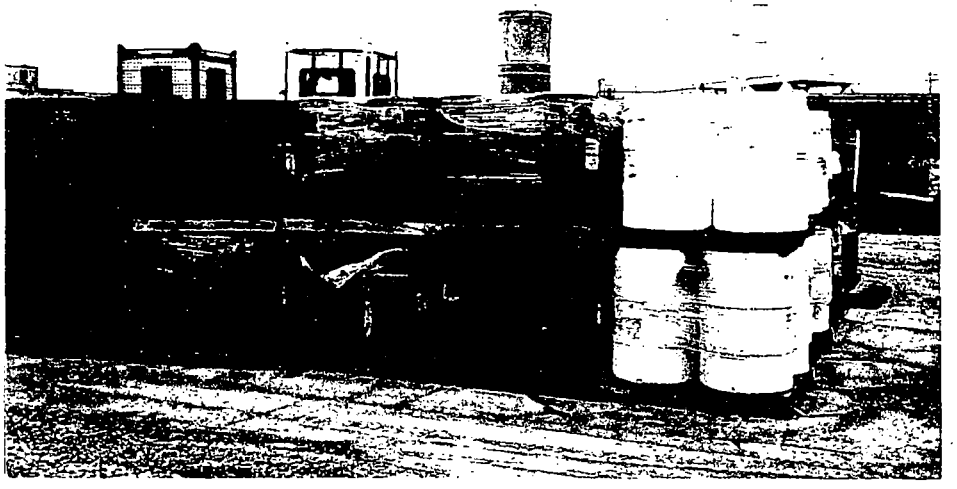
Location: SWMU 1
Date: 12/08/92

Photograph No. 3
Orientation: Northwest
Description: Drum storage in the Operations and Storage Area. Note the staining and storm water runoff on the concrete pad.

Location: SWMU 1
Date: 12/08/92

Photograph No. 4
Orientation: North
Description: Deteriorating drums in the Operations and Storage Area.

Location: SWMU 1
Date: 12/08/92



Photograph No. 5
Orientation: East
Description: Drum storage in the Operations and Storage Area.

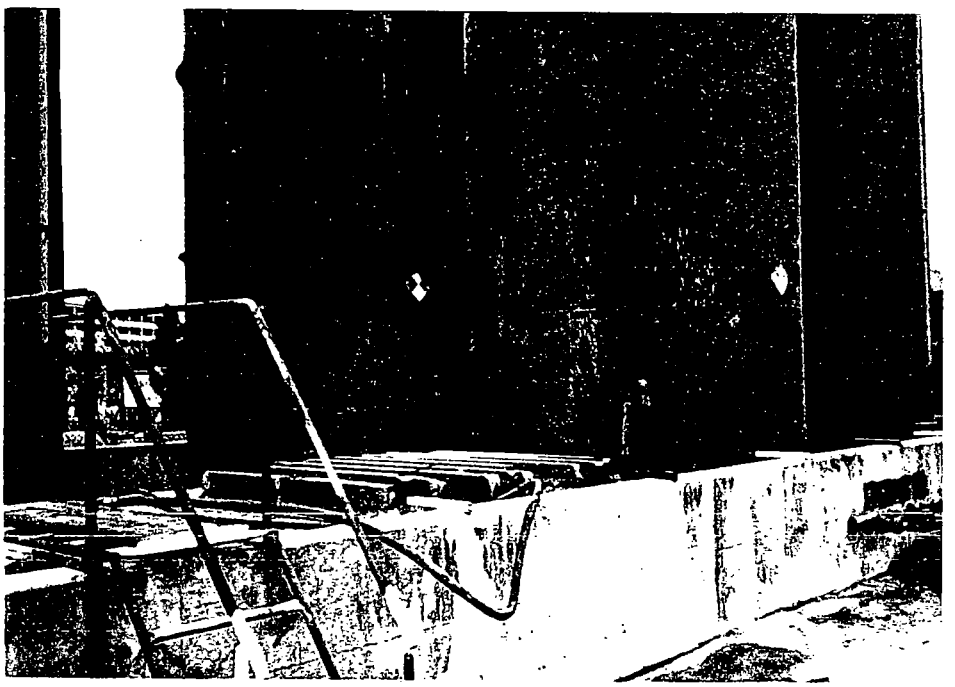
Location: SWMU 1
Date: 12/08/92

Photograph No. 6
Orientation: Southeast
Description: Milky white material at the truck loading dock area in the Operations and Storage Area.

Location: SWMU 1
Date: 12/08/92

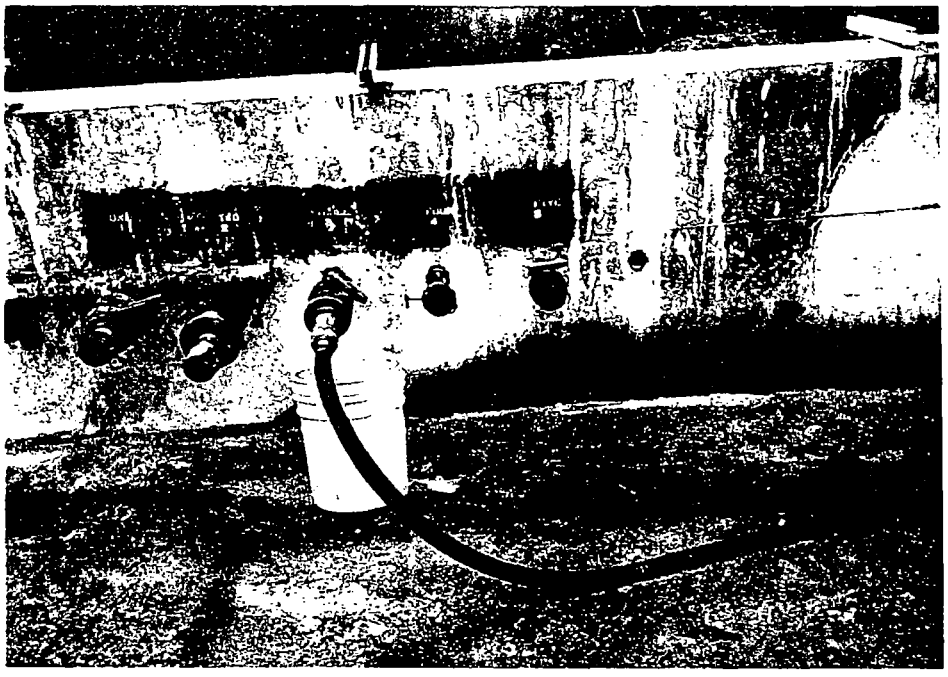
Photograph No. 7
Orientation: South
Description: The location of the Former Chromate Destruction System.

Location: SWMU 3
Date: 12/08/92



Photograph No. 8
Orientation: Northwest
Description: The Chemical Storage Tanks.

Location: AOC 1
Date: 12/08/92



Photograph No. 9
Orientation: West
Description: Staining along the dike of the Chemical Storage Tanks.

Location: AOC 1
Date: 12/08/92

ATTACHMENT C
VISUAL SITE INSPECTION FIELD NOTES

Fairly wide spread area.
1330 PRC exiting facility

[signature] 12-8-92

Terry Kebover - Orchem PA/SI
Conditions: Cold, Flurries
≈ 30°F.
PRC: Pete Zelinskas
Stan Lynn (photos)
OEPA: Mark Metcalf
* Preliminary recon, PRC noted lots of drums - informed OEPA
1000 Ashland - Clark Chemical
Orchem - 1985 took over site. Site was a mess and overgrown with weeds. Looked like no activity for quite a while.
Ditched storage tanks.
Cleaned up buildings.
Orchem - 4 locations in town. Make to spec.

[signature] 12-8-92

will be vacating this
property in ≈ 3-4 months
Leased Texo, Corp.
731-3400 Elmer Korte
ops: Store materials
Blending, specialty chems
used in food processing.
Degreasers, alkaline, acidic
cleaners.
Paul Jones } R&D
Brenda Cook } Env. Serv.
75-80% into food
industry.
wastes - washout from
tank cleaning. MSD
discharge occasionally.
Most wash water is
sent back through system.

[signature] 12-8-83

Tank washings, water
mainly. Collect washout
Put back into blend.
Sometimes must be
discharged to MSD.
Check MSD. Filed for
permit in July 1985.
Never processed. Have
reapplied. Waiting for
response.
Not known if wells
on-site.
Ashland - Bulk chem & pkg.
Chloride [illegible] chemical
Globe chemical.
1050 Walk around
Product storage indoors.
Raw materials.
Some staining.

[signature] 12-8-83

Added section. Blending
tanks messy. Drain on
floor.
Trailers. drum shipping
front of lot, trailers
stay on property.
* Raw material storage
Nitric acid
* Storage tanks on-site
5 tanks - dike was installed
3.500 . 10,000, 10,000
two inactive. Ashland.
Had Ashland remove a
few when they moved in
Fairly clean inside dike.
* Neutralization tanks
Removed. No idea what
happened. Lots of
empty drums. Little

[signature] 12-8-92

cleaner then what I saw
earlier.
Full drums here and there.
Stacked in some. Some
were weathered and have
been sitting out a long
time.
Drums at back of lot.
Stacked mainly. Lots
of weathered drums.
Condition of drums
gives impression that
most have been sitting
around for a while.
Gravel looks fresh.
Orchem replaces every
so often. not sure P.Z.
At least (500 or 600)
drums on site.

[signature] 12-8-92

72

Mostly gravel throughout the site. Some concrete here and there. No definite waste storage area that was used by Ashland. Not listed on map and not known by Orchem. Stormwater drain in center of facility. Full of water.

Truck loading area. Milky looking water in collection area. Orchem officials not really saying much, letting us lead.

1330 PRC exiting site

[signature]

12-8-95

73